inhalation therapy

December 1961

Volume 6 Number 6

IN THIS ISSUE

The Final Story on the Workings of

A. A. I. T. Headquarters

The Importance of

Safety

The Complete Story of the

Buffalo Meeting



JOURNAL OF THE AMERICAN ASSOCIATION OF INHALATION THERAPISTS



Oxygen in asthma: a question of "how"

The chief question concerning oxygen therapy in severe asthma is how best to administer it. For some asthmatic patients, intermittent positive pressure breathing (IPPB) is needed to obviate the danger of respiratory acidosis, or remedy this condition when it is present. Indeed, IPPB or a body respirator "... may provide the only means of saving life..." in some desperately ill patients.

"If the patient is cyanotic or has some complicating pathology such as cor pulmonale, oxygen should be administered by the most appropriate method with care to avoid a too high concentration."

Whatever your choice of means, oxygen remains a basic aid to the patient with severe asthma. Linde Company, Division of Union Carbide Corporation, 270 Park Avenue, New York 17, N. Y. In Canada: Union Carbide Canada Limited, Linde Gases Division, Toronto 12.

References: (1) Cole, M. B., and Raynolds, A. H.: South. M. J. 54:17 (Jan.) 1961. (2) Renzetti, Jr., A. D.: Bull. Nat. Tuberc. A. 47:7 (April) 1961. (3) Kaufman, M., and Kaplan, M. P.: J. Kentucky M. A. 59:251 (Mar.) 1961.

"Linde" and "Union Carbide" are registered trade marks of Union Carbide Corporation.

LINDE _ FIRST IN OXYGEN U.S.P.





REFRIGOMATIC OXYGEN TENT

Now available with STAINLESS STEEL CABINET

Produces and holds true high concentrations

Mechanical tests show the RV 3 Refrigomatic reaches a concentration of 100% . . . and holds 100% after oxygen in cut off. In patient use, with normal attention by nurses, concentrations of 70% to 80% are easity maintained.

Provides highest humidity

The Refrigomatic provides three humidity choices, from 40% to an absolute 100% plus fog. Many tents produce fog without the necessary 100% humidity. Refrigomatic's new-type nebulizer and high-humidity wheel make possible complete saturation of the atmosphere.

Cleans completely in minutes

Positive Control

UL Approved

- Efficient Economical
- May Be Cold Sterilized
- Utilizes Mucolytic Detergents

Write for complete literature.

The JOHN BUNN Corporation

Manufacturers and Distributors of Specialized Hospital Equipment

1298 Main Street

Buffalo 9, New York



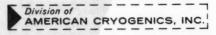
McKesson Compact VALOR TENT

Vital and timely for the profession is this newly developed VALOR tent, designed for maximum efficiency, light weight and low cost. Compare these features with those of any equipment you now use:

- Hermetically sealed air conditioning unit.
- Compressor unit operates continuously.
- Streamlined steel cabinet only 18" x 21" x 35".
- Aluminum evaporator coils provide maximum cooling efficiency.
- Evaporator container of fibre glass non-toxic plastic.
- Noiseless, high capacity motor for ventilation unit.
- Vinylite canopies with three zipper openings.
- Canopy supports adjustable for any type bed or crib.

Prices from \$550. Also available, high humidity attachment #1179, \$85. See your McKesson dealer, or write to us.

MCKESSON APPLIANCE CO.



2228 Ashland Ave., Toledo 10, Ohio



inhalation therapy

DECEMBER 1961

ARTICLES

- President's Acceptance Speech

 Leah Tharaldson, C.R.N.A.
- Your Association And How it Operates

 Albert Carriere
 - Safety First, Last, Always
 Richard Conover
- Professionalism Stressed at Buffalo Meeting

 James F. Whitacre

REGULAR FEATURES

Equipment News 25

JOURNAL OF THE AMERICAN ASSOCIATION OF INHALATION THERAPISTS

EDITORIAL OFFICE 260 Crittenden Boulevard Rochester 20, New York BUSINESS OFFICE 332 South Michigan Avenue Chicago 4, Illinois

JAMES F. WHITACRE

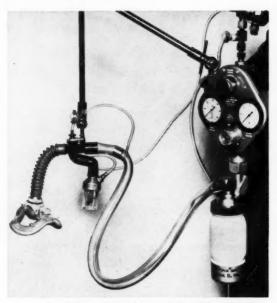
Publisher ALBERT CARRIERE ADVERTISING REPRESENTATIVE Samuel N. Turiel & Associates, Inc. 430 North Michigan Avenue Chicago 11, Illinois

Staff Artist
ROSEMARY F. YOUNG

Production Manager FRANK HUSTON

Established 1956 and published bi-monthly in February, April, June, August, October, and December at 332 South Michigan Avenue, Chicago 4, Illinois. Single copies \$1; subscriptions \$5 per year to non-members in the United States and Canada, \$6 elsewhere; \$3 to members (included in dues). Copyright © 1961 by the American Association of Inhalation Therapists. All rights reserved. Reproduction in whole or in part without the express, written permission of the Publisher is prohibited.

NOW! A NEBULIZER THAT'S NEW



The Mainstream® TepidMist® Nebulizer — Remodeled and Improved for Greater Dimension in IPPB Therapy by Mist O, Gen®

NEW IMPROVED FEATURES The introduction of the Mainstream TepidMist Nebulizer offers many additional advantages in positive pressure therapy.

- It provides heated aerosol when desired, but in no way affects the maximum efficient operation of the IPPB valve.
- The heating unit is easily detached from the plastic reservoir, and does not come into contact with the aerosol solution. The reservoir, when removed, can be cleaned separately without damage to the heating unit.

In addition, the Mainstream TepidMist Nebulizer:

- Provides true aerosol at body temperature.
- · Carries heated aerosol to the site of mucus plugging.
- Distributes moisture throughout the entire respiratory system.
- Provides adequate humidity for continuous IPPB therapy.
 Gives the most effective particle size.
- Is adaptable to all IPPB equipment, including the Bennett, Dotco, Ventalung, Bird, Mine Safety Appliance, Emerson, and others.

 • Is easy to operate in the hospital, office, or at the home.

NEW LOW PRICE . . \$89.50 *

The Mist O2 Gen Equipment Company . . . recognized leader in the research and development of dependable humidification equipment for use in IPPB therapy.

Considerations in Humidification by Nebulization: Ivan Cushing, MD, and William F. Miller, MD. Diseases of the Chest, Oct. 1958, Vol. XXXIV, No. 4.

Pulmonary Emphysema: Hurley L. Motley, MD. Missouri Medicine, June 1960, pp 701-709.

EQUIPMENT COMPANY

2711 ADELINE STREET . OAKLAND 7, CALIFORNIA

for more perfect intermittent positive pressure breathing

the easy-to-use

honaghan

ventalung

The Monaghan Ventalung leads the way to recovery from lung diseases because it provides regular, dependable intermittent positive pressure breathing with practically no patient effort while it mixes any amount of oxygen (from 40% to 100%) with inspired air.

Your patient is comfortable and content in hospital, doctor's office, or home. Useful in many locations throughout the hospital, the Ventalung provides intermittent or constant nebulization, operates from either a piped system or a gas cylinder with equal simplicity and ease. It is also equipped for either push-button or automatic resuscitation.







When your patient stands in need of intermittent positive pressure breathing for faster recovery, think first of the best... Monaghan.

For details write Monaghan
500 ALCOTT STREET • DENVER 4, COLORADO
for the name of your nearest representative or dealer.



Using an improved pneumatic balancing principle, the new **Ohio Dotco Respirator** provides maximum aerosol effectiveness and patient comfort. Delivery pressure, mask pressure and flow sensitivity are clearly indicated and easily adjusted. An **Auto-Cycler Model** is also available. It provides a timed pause between breaths for the patient who does not make a breathing effort. The **Oxygen Diluter Model** has all the features of the standard unit plus a device which adds room air to the oxygen. All models of the new Ohio Dotco Pressure-Balanced Respirator are available for both cylinder and pipeline applications.

For detailed information please request Bulletin No. 4780, Dept. No. IT-12.



The NEW DEVILBISS No. 701 High-Efficiency, Portable



SUCTION PUMP



- COMPLETELY ASSEMBLED-ready for use
- COMPACT-occupies approximately 1 sq. ft. of space
- LIGHT WEIGHT-only 111/2 lbs. -completely
- ADJUSTABLE—can be regulated from 0 to 22 inches of vacuum
- QUIET-will not disturb patients
- SAFE-equipped with two 1 quart size bottles; when collection bottle is full, unit continues to operate using overflow bottle
- EASY TO CLEAN-bottles and tubing removable for sterilizing
- EQUIPPED with standard bottles and stoppers for quick replacement in case of damage or breakage

Price

\$89.50

Complete

THE DEVILBISS CO. · Somerset, Pennsylvania Suppliers to the Medical Profession Since 1888



BENNETT AP-4 PORTABLE IPPB UNIT

Model AP-1 is a new portable IPPB unit, employing the unique Bennett flow-sensitive valve. It is small, light, quiet in operation, and entirely self-contained. The controls are simple and straightforward. The unit delivers room air, with provision for ontional

The unit delivers room air, with provision for optional oxygen enrichment through the nebulizer. It operates from 110V AC; or, by use of an accessory converter, from a car cigarette lighter.

Please write for literature or demonstration.



BENNETT RESPIRATION PRODUCTS, INC.

1639 ELEVENTH STREET, SANTA MONICA, CALIFORNIA

Distributed by Puritan Compressed Gas Corporation



President's Acceptance Speech

TO say, "thank you colleagues," cannot really express my sincere appreciation of the honor you have given me. I would not presume the privilege of expressing humility before you either, for I believe as Paul Eldrige did, that "true humility is possible only for the greatly successful;" and he continued with saying, "even the tallest mountain knows how far it is from the sky."

Today we who are the A.A.I.T. are celebrating our seventh birthday. If some of our retired but still esteemed and honored leaders could have been here at the meeting which is just closing, I'm sure they would rejoice, as do all of you who are still going strong, that many of the dreams that seemed utterly impossible at the Organization Meeting have now been achieved.

Many of you remember the early Annual Meetings when we were all inspired by our mutual will to gain a goal. Why, at those meetings many seemed to have "the strength of ten;" but when we got home again we found our strength comparable to that of, "the Prophet in the land of the deaf;" and we thought over and over again, "it's impossible; I can't do that." Then having rationalized that an impossible goal had been set, we settled back into our same old ruts. Many of us then seemed to hear a small but clear voice saying, "is it really impossible?"

Many heard that call, but comparatively few heeded it, or realized that it might be the voice of God saying, "open the door: I am hereby giving you the opportunity to grow inches, or feet, or miles, whichever your capacity may be. I am bidding you to make ready to give help, and perhaps bring blessed healing to my gasping children."

Those of you who heeded that call worked long and hard to bring the A.A.I.T. and the A.R.I.T. into successful being. You knew that the intervening hurdles were insurmountable, and your friends all knew that the things that you proposed to do were impossible; but somehow you were guided to know that the only possible way to succeed was straight through the middle of the impossible.

I leave to you the privilege of reflecting on the many impossible goals that the A.A.I.T. has achieved during the last seven years.

Mr. President, I know that I speak for the entire membership in thanking you and all of your predecessors for your excellent leadership, and your many accomplishments in your organization's best interest.

Members at large: I hope that you will be able to retain much of the lore that you have been exposed to during the past few days, and all of the enthusiasm that you have engendered in communion with your colleagues.

Standing Committee members: I pray that you will continue, during the coming year, in the same degree of selfless dedication to A.A.I.T. that you have shown in the past.

Board of Directors, and Fellow Officers: I invite your continued inspiration in directing the progress of the A.A.I.T. toward its goal.

Members of the Board of Advisors: I deem it one of my life's greatest privileges to have been chosen by my colleagues to receive your council, and as their President to act on it.

To all of you I pledge my heart, my energy, and my ideals to serve and to guide you during the coming year.

Once again I want to thank you! I am well aware that many of you fully deserve to have received this honor today; and I pray that I will bring you the report of still another great and successful year at the next annual meeting. I want only to add that at that time I hope none of you will feel constrained to say, "she rested on her laurels;" for I am in full agreement with the adage which states: "The only person who can rest on his laurels is wearing them in the wrong place."

Your Association – And How It Operates

THIS is the fourth and final article in the series explaining how your association operates.

In the first three articles an effort was made to outline the duties of the Secretary and of the Convention Manager, both assistants to the Executive Director, as well as to indicate the work done by the Executive Director himself.

In this article, the contributions made by some other individuals and groups will be discussed briefly.

First, consider the job of Mrs. Agnes Forrest, our Secretary-Treasurer, who has served in that position over four years.

In addition to counter signing all A.A.I.T. checks, Mrs. Forrest gives a great deal of her thought, time and energy to running the financial part of each annual meeting. For it is she who accepts all



Mrs. Agnes Forrest, AAIT Secretary-Treasurer.

money for registration charges, meals, dues, and/or processing fees paid during this one week every year. This is not exactly a "fun job", since it means being "on tap", as it were, for the entire meeting. So when you see Mrs. Agnes Forrest with her little green-gray cash box, and her books of receipts and strips of luncheon tickets, remember that she is performing an important job so that you members can enjoy a smoothly-run and efficient meeting.

After the annual meeting, Mrs. Forrest prepares a complete report of all receipts, and then files this report along with her receipts and bank deposit slips at national headquarters so that the auditor may have access to the records for our annual audit.

Another important job is the work performed by the members of the Admissions Committee. During the past year, Joseph Klocek, A.A.I.T. President, served as Chairman of this important committee. Mrs. Grace Farley, an A.A.I.T. Board Member, served as the second member of this committee.

Both these people have done a remarkable job of screening applications. Many letters have been written by them to applicants and/or their sponsors and references. This is often necessary, either because the applicants have not completely filled out the application, have not provided proof of their high school education, or, as sometimes happens, given information of a doubtful nature.

As I write this, the number of applicants rejected for various reasons does not come to mind. However, it is rather high, especially when you consider that the A.A.I.T. wants new members.

There are other committees, all of them



Mrs. Grace Farley of the Admissions Committee.

important, in fact, vital to the operation of the A.A.I.T.. They are as follows: Education, Industrial Advisory, Judicial, Nominating, Publications, Safety, Oxygen Service, Research Information, and Membership Promotion.

While we cannot go into detail about the functions of every committee, it may be worth mentioning the work of several.

The Research Information Committee, for example, is headed by Mrs. Leah Tharaldson, a member of the Board of Directors, and a tireless worker. Assisting her on this committee are the following: Vincent J. Collins, M.D., Don Gilbert, James F. Whitacre, Ross Hawkes, Vincent Kracum, J. Howard Newell, and George R. Hight.

The important Safety Committee had died a slow death during the last several years. Its importance prompted us to revive it, and to turn its Chairmanship over to a chap we knew would really do something. This was Richard M. Conover, who has re-organized the Safety Committee, and intends to make a real contribution. Assisting Mr. Conover are the following: Max Glasser, Gareth Gish, Clarence Troublefield, George D. Cranton, and Paul V. Chaballa.

Mrs. Vera Arguien is Chairman of the Membership Promotion Committee, and has as members of her committee the following: Leonard Gurney, Charles Rheinheimer, Joseph C. Purvis, Jr., Francis Bryant, Harold Singer, Clifford Hall, Jr., William Carey, John J. Viers, Walter Palmer, John Appling, Easton Smith, Bob Kratz, Gary Miller, Evelyn Kwit, Sister M. Arnoldine, Ruth Bumgarneo, Theodore London, Catherine L. Marler, L. Ernest Reynolds, Samuel Runyon.

Because of the important job this committee has to do, there is no question that other members will have to volunteer.

The greatest difficulty faced by our committees is simply that of getting together for meetings. Since we have just the one annual meeting, the conscientious chairman will make it a point to have one or more meetings during that week. For the most part, our committees have to function via the mail, and with so many people having full-time jobs and no secretarial help, this is not easy. Nevertheless, our committees have performed rather creditably, when one considers all things involved, and it is this working committee structure which we must strengthen for the future.

The hardest working group involved in the operation of the A.A.I.T. is, oddly enough, a group of outsiders. I refer to our Advisory Board, which while not a committee does function like one. Consisting of six physicians, three from the American College of Chest Physicians and three from the American Society of Anesthesiologists, the Advisory Board, as explained in a previous article, controls all matters of policy and public relations.

Were this not so, and the decisions of the A.A.I.T. Board of Directors not subject to the scrutiny and approval or disapproval of the six physicians, we would not enjoy the sponsorship of either the American College of Chest Physicians or the American Society of Anesthesiologists.

Some members have complained about this, indicating that such an arrangement makes the A.A.I.T. a captive organization.

This is not the entire truth, however, for the only purpose in having this control is to guarantee that the Board of Directors shall not make any decisions contrary to accepted ethical and professional conduct. Since so much of our

Safety-First, Last, Always

Richard M. Conover®

FROM the time that oxygen was first used, there has been a certain degree of danger in its use. Fires and explosions have been associated with oxygen, and the danger has not been decreased through the years.

Granted, a considerable amount of progress has been made towards the elimination of accidents with the use of oxygen, but not enough. The two big questions we should ask ourselves are: "As therapists are we doing everything to prevent such accidents?" and, "Is the public being properly informed on this subject?"

These problems can be approached from many angles. One solution could be a scientific exhibit illustrating the problems associated with oxygen and its use. This exhibit could be used at medical and professional conventions throughout the country. Another solution could be to launch a nation-wide safety campaign which would include seminars in schools of medicine and nursing as well as meetings in cities and towns to acquaint the public with this major problem.

The American Association of Inhalation Therapists (AAIT) as well as each of its numerous chapters has a safety committee. This committee is charged with the duty of attempting to prevent severe accidents. This can be done in only one way, and that is with the cooperation of each member of the Association. Any incident, regardless of its magnitude, should be reported to the safety committee. When this is done an analysis of the accident can be made, and in this way the events leading up to the incident and ways of preventing its happening again can be determined.

Whenever an accident occurs, either from the use of oxygen or from any other cause, most people seem to think it is the result of faulty equipment. This is not always the case. It could be said that over ninety-five per cent of the accidents that occur are due, not to mechanical, but to human failures. If we, as therapists, would double our efforts, both in our own departments and in our teaching capacity, many of these accidents could be prevented.

Not long ago someone gave a patient in an oxygen tent a package of cigarettes and matches. The result was seventy-five per cent burns over the patient's body which eventually caused his death. This incident is mentioned to point out the need for a more intense drive in both education and in the formation of departments in hospitals which now have none. Had the hospital where this accident occurred had a department of oxygen therapy in operation, perhaps this disaster

*Supervisor, Inhalation Therapy, Duke University Medical Center, Durham, North Carolina; Chairman, Safety Committee, American Association of Inhalation Therapists.



could have been averted

The case mentioned is just one of many that cause needless loss of life and equipment. Certainly a large percentage of these are minor; however, this does not lessen their importance. In the past, hospitals which used "K" type oxygen cylinders concurred in the use of straps or chains in securing the cylinders to a patient's bed. As long as the oxygen traffic was at a minimum, this was satisfactory. In the present age, however, it is not. One suggestion that is being put into effect in a southern medical center is the fastening of a wooden bar to the wall, with toggle bolts, from thirty-six to forty inches from the floor. A heavy duty chain which will fit around the cylinder is then attached to the bar. (See fig. 1) When a regulator and tubing is placed on the cylinder and the equipment put into operation, it is very difficult to turn the tank over. When it is time for the cylinder to be changed, the

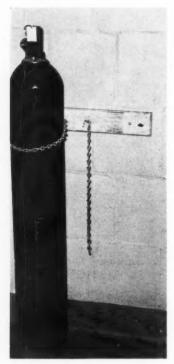


FIG. 1

patient does not have to be needlessly disturbed, for the entire change can be made without the patient's ever knowing. Should the patient's bed need moving, the danger of turning the cylinder over has been removed since it is not attached to the hed.

This is just one example of what can be done towards removing hazards. There are many pamphlets, brochures, and papers that have been written on the subject of safety. Unfortunately, not every department has a reprint file, which should be essential.

Ciliberti and Wood¹ mention that thirtytwo cases of explosions were the direct result of static electricity, and in the majority of these cases it was found that there was little or no grounding of the equipment. While these cases were concerned with anesthesia gas-oxygen mixtures rather than oxygen-air mixtures, wherever a high concentration of oxygen is being maintained, grounding of equipment is essential. The equipment now on the market, for the most part, has a ground wire included in the electrical system. However, all too often, some one has an electrical outlet that does not have the ground wire built in. When this happens. rather than obtaining an adapter, they simply cut the grounding pole off of the plug. This is just courting trouble. Rather than cutting the pole, replacement of the wall outlet is desirable.

Reduction of electrical hazards and the use of conductive equipment werever possible is heavily stressed by Gilroy². When planning a department either in an existing or in a new hospital, the safety factors should always be near the top of the list. It should be remembered that gaseous fires and explosions are not restricted just to hospitals. This is shown emphatically in A. E. Miller's³ article on the use of oxygen in aircraft. It was pointed out by Mr. Miller that a totally leak-proof circuit is needed. The enormous danger encountered when transfilling cylinders is also brought out in his article.

Much emphasis is placed on the fact that oxygen will not burn. What should be emphasized is the fact that oxygen supports combustion, and that a combustible material in the presence of oxygen will burn vigorously. If a demonstration on the use of oxygen with a combustible material is used, this gets the idea across. An ordinary cigarette can be used here. After lighting it, the cigarette is then introduced to flowing oxygen, as from a piece of rubber or vinyl tubing. The cigarette will immediately flare up, giving a vivid demonstration.

In his manual for prevention of fires and explosion, Dr. George Thomas4 points up the necessity of having proper handling and storage facilities for compressed gases. One of the most important items included is the draping of gowns, bags, masks, etc., on cylinders of oxygen and other gases. I think that this is one of the easiest ways known to start a flash fire, especially if the temperature is exceptionally high. All too often this is being done, not with a deliberate knowledge of doing wrong, but simply because it may lighten the load being carried and the cylinder is handy. So often this is seen and not corrected at the time. A few seconds is all that is needed to start a fatal fire or to cause an explosion.

Several months ago a survey was made of all manufacturers of oxygen equipment and gases. One of the interesting replies was from a Swedish firm concerning regulators and fires involving them. After a number of instances of fire had occurred, the source was finally traced to some of the internal parts of the regulators. These parts were diaphragms and packings made of rubber. By using parts made of another substance, one that is not combustible, the instances were reduced.

Another case resulted from using an oxygen regulator on a cylinder of compressed air that had been filled by an oillubricated compressor, and afterwards using it on an oxygen cylinder. This demonstrates the necessity of keeping separate the regulators used on different gases. The importance of using non-oil base lubricants is shown in a case of a regulator catching fire. Upon inspection, grease particles were found to have entered the regulator. Probably the grease was on the cylinder valve and was injected when the regulator was used.

For a rapid reference in p.s.i. of cylinders at various temperatures and appropriate weights and dimensions many sources can be drawn upon.^{5 6 7 8 9 11} There is also a simple way, used by many, to determine the length of time a K cylinder will last. The formula is:

An example would be: 1500 lbs. p.s.i. x 3=4500. 4500 ÷ 15 L/min.=300 300 ÷ 60=5 hours, the time the tank will last.

It should be remembered that the above formula is used for cylinders with a 220-244 cubic foot capacity. When the duration of an "E" cylinder is desired, multiply the pounds pressure by 0.3; for "D" cylinders 0.16 is used; and for "G" cylinders 2-2/3." The factors in these formulae are actually a bit higher than indicated here. However, use of the existing factors allows for a safety margin.

Although there are usually twenty to thirty minutes of oxygen remaining in a K cylinder after the gauge indicates 'empty,' this should definitely not be relied upon. In many cases when students have been told of this reserve, it has been found that they are relying on this should they forget to change the tank soon enough. The only drawback is that it is not always known when the needle hits zero; this can result in the patients' running out of oxygen. Therefore, it is suggested here that the habit of telling students and others of this reserve be stopped since all too frequently the reserve is not what one believes it to be.

In summary, four primary items are brought to mind. The first: a complete nation-wide education program; this to be accomplished by a scientific exhibit and seminars in medical and nursing schools. Second: a more intense safety campaign directed to the public as a whole. Third: complete cooperation with the Safety Committee of the American Association of Inhalation Therapists; this to be done

Professionalism Stressed at Buffalo Meeting

Forty therapists take Registry orals; thirty-two granted registration.

Mrs. Leah Tharaldson is new president; Joseph Klocek, chairman of the board.

by James F. Whitacre

SIX of our 16 speakers this year placed major emphasis on professionalism in one aspect or another. Now that we have Registry, our members are striving not only to improve their knowledge qualifications, but also to develop the elusive, though highly desirable attributes of the professional.

In discussing "Internal Public Relations," Dr. Hylan A. Bickerman, of Columbia-Presbyterian Hospital in New York, carefully outlined the interrelations of the therapist with the patient, the nursing and medical services and the administration. One of the chief things distinguishing the professional therapist from an unprofessional technician is his ability to combine good communication and thoughtful, ethical conduct with technical excellence.

At the Monday luncheon session, Dr. Vincent J. Collins, of Cook County Hospital, Chicago, told the group that "a profession may be described as requiring dedication. The watching of the clock is not involved . . . It is guided by a code of ethics—which basically is a practical interpretation of the Ten Commandments."

Mr. Abraham Lister, of Shor's Medical Oxygen Service, Elizabeth, New Jersey, in describing service companies and their activities, stressed the importance of the therapist's relations with the patient and his family, and with the physician, whom he often represents to the family. The necessity for the professional to master all technical matters was also mentioned, but as a foregone conclusion.

Dr. Franz Reichsman, of the University Medical Center, Rochester, N. Y., dealt with the need to understand the patient and his reaction to his illness, the need to be a good listener and to make explanations and reassurances where possible, and to know when and how to refer the inquisitive patient or his family to the physician. Other cardinal points he underlined were the necessity for absolute confidentiality, and the care that should be taken to prevent a patient's hearing (or hearing about) staff disagreements regarding diagnosis, therapy or prognosis.

In his address to the membership at the Annual Report luncheon, Albert Carriere, Executive Director of the AAIT, reiterated the need for a strong professional attitude, which includes the courage to recognize unethical practices and to do everything we can to stamp them out. It is not enough, he said, just to ignore or not participate: counter action should be taken, and the proper authorities notified.

One of the features of the first annual banquet was the presentation of an award to Sister Mary Yvonne, CRNA, of St. Francis Hospital, La Crosse, Wisconsin, for her long and distinguished service to inhalation therapy. In addition to serving on the Board of Directors. Sister Yvonne is author of our magnificent Code of Ethics. She is currently the Registrar of the ARIT. The award plaque was presented by retiring president Joseph J. Klocek. RN.

Another highlight of the banquet was

the inspirational address by Dr. Everett Baker, of St. Joseph's Infirmary, Louisville, Kentucky. Dr. Baker helped us to see that neither the patient, the doctor, the nurse, nor the therapist can do the job without God's help. He pointed out many of the wonderful things we need not only to be thankful for, but to keep in mind to help us in our most important mission of good patient care.

At the meetings of the Registry Board during the convention, two important things were accomplished. First, 32 therapists were registered after having successfully completed written and oral examinations (see list in box elsewhere in this issue). This brings the total number of registered inhalation therapists in the United States and Canada to 68. Second, steps were taken to make it possible for Service Company members with proper medical supervision to apply for registration (not heretofore permitted).

The Advisory Board, in reviewing some events which have occurred in recent months, recommended that some additions be made to our Code of Ethics, to make it more unmistakably clear that it is unethical for therapists to receive commissions or gratuities for equipment which has been sold as a result of their recommendations; or to accept favors in return for promotion of certain products to the exclusion of others.

Dr. Albert H. Andrews, Jr., of Presbyterian-St. Luke's Hospital in Chicago, was first speaker of the meeting, and told the standing-room-only audience of their responsibilities in keeping equipment in top condition—of testing the *testing* equipment to check its accuracy, and of ways to adapt apparatus for special applications.

The next morning, "The Role of the Inhalation Therapist in Resuscitation" was elaborated by Dr. Duncan A. Holaday, of the University of Chicago Medical School. Dr. Holaday's extensive demonstrations of mouth-to-mouth artificial respiration and closed-chest cardiac massage—both done on a special manikin—were enthusiastically received, and the questions were so numerous they had to be stopped to keep the meeting on schedule.

"Logistics of Inhalation Therapy" was the topic of Dr. Meyer Saklad, of Rhode Island Hospital, Providence, that afternoon. Dr. Saklad stated that the only way for a department to function effectively is for the personnel to know everything about their equipment and techniques, and to have a carefully planned communication system with each other and with other departments, so that properly functioning equipment and personnel can be "in the right place, in the proper quantities, and at the right time."

Dr. Theodore H. Noehren, of the University of Buffalo Medical School, spoke on "Factors Influencing the Effectiveness of IPPB," and described some extremely interesting studies of ventilation in dogs using an ether clearance technique, which demonstrates the effect of the presence or absence of airway obstruction on air flow and other variables of respiratory aerodynamics

Dr. Jerome Maurizi, also of the U. of Buffalo Medical School, then talked about the "Treatment of Carbon Dioxide Intoxication." He gave a description of the development of the syndrome, and the pathophysiological blood changes associated with it; then progressed to the treatment. Dr. Maurizi is of the opinion that such patients should be ventilated (automatically, if necessary), and that if this is maintained, oxygen may be given to relieve hypoxemia as needed, without worry about apnea.

Wednesday's session opened with Dr. Robert M. Lawrence, of the University of Rochester (N.Y.) Medical Center, speaking on "The Use of Specialized Equipment." Dr. Lawrence showed a color film depicting the treatment of a crushed chest injury with an automatic ventilator, and discussed paradoxical respiration and other problems associated with this sort of injury and with other patients requiring specialized apparatus and skills for successful management.

Sister Mary Antonella, Administrator of St. Joseph's Infirmary, Louisville, Kentucky, then gave her views of "The Administrator and the Inhalation Therapist." She traced the history of inhalation therapy over the past 25 years, then showed



Frank Huston and James Whitacre talking with new president Mrs. Leah Tharaldson.



Service member Mr. Abe Lister and Mrs. Lister.



Mrs. Agnes Forrest greeting Dr. Leon Abundio V. of Mexico as Mr. Carriere and Mr. Abram Jackson look on.



A picture of the Nun's Get-Acquainted Hour which preceded the banquet.



A panoramic view of the banquet.



Emil Stary, registered therapist, provided piano music during the Get-Acquainted Hour.



Albert Carriere talking with Dr. Everett Baker guest speaker at the banquet.



Joseph Klocek presenting award citation to Sister Yvonne.



At Get-Acquainted Hour from left to right, Jack Sangster, Mrs. Joan Grayson, Gordon Eaverson.

the Administrator's interest in promoting teamwork among doctors, nurses and therapists, to effect better patient care. She suggested that introspection and prayer would never be amiss in helping the therapist become more dedicated to his job of helping the sick.

"The Use of Simple Pulmonary Function Testing" was treated by Dr. Howard G. Dayman, of the University of Buffalo Medical School. Dr. Dayman gave an analysis of spirometry, and showed by many slides how spirograms made with fast-moving drums could be used to show many useful things about the state of the patient's lungs. This is in contradistinction to spirograms made with conventional slow-moving drum spirometers, which give somewhat limited information because the record is not spread out enough to permit accurate analysis.

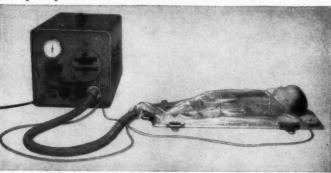
Captain Frances A. Parks, Army physiotherapist from Valley Forge General Hospital, Phoenixville, Pennsylvania, gave an enlightening talk on "Breathing Exercises for Pre- and Post-Operative Thoracic Surgery Patients," which included valuable information (new to most inhalation therapists) about the muscles involved and what exercises can be done to strengthen them to help improve ventilation. Also, how to promote better ventilation of one lobe or another of the lungs by special exercises which she showed on slides and by demonstration. This was the first time we have had a physiotherapist on our program, and her information was both interesting and well-received.

The lectures were all tape recorded by the Education Committee, and are all already available from AAIT Hq. The Education Committee also wishes to announce the publication of a small "Educational Aids" guide, which includes listings of lantern slides, films and all of the tape recordings of the annual lecture series from 1956 through 1961. This booklet is also available from AAIT Hq, at cost: 25c. It is recommended that chapters and/or interested individuals make use of these aids in their education programs.

EMERSON "UCYCLIT-B" Respirator

Triggered by the patient's own breathing impulses, the "Ucyclit" augments each spontaneous effort. It assists like an IPPB unit, but without masks or tubes at the airways. Negative pressure inside the soft plastic wrap expands the chest. A shell arched over the

body provides space, but rests on the bed, not the patient.



For details please request Form 82-B

J. H. EMERSON CO., CAMBRIDGE 40, MASS., U. S. A.

The following people have been admitted to the American Registry of Inhalation Therapists:

Vera Arguien El Monte, California James Bolton New Haven, Connecticut

Ruth Bumgarner Miami, Florida

Paul Chaballa, R.N. Elizabeth, New Jersey

Emil Cioffoletti New Rochelle, New York

Joseph Clark Ottawa, Ontario, Canada

Agnes Corcoran Bridgeport, Connecticut

Leslie Freedman Washington, D. C.

Gareth Gish Overland Park, Kansas

Melvin Hall Coral Gables, Florida

George Jester Trenton, New Jersey

Howard Justice Nashville, Tennessee Robert Knouse

Philadelphia, Pennsylvania James Krupla

Clifton Heights, Pennsylvania

Desmond LeMesurier Providence, Rhode Island

Theodore London Chicago, Illinois Eileen Lovelace

Gary, Indiana Stephen Marich

Bethlehem, Pennsylvania

William McCluskey Cleveland, Ohio

Robert Miller Portland, Maine

Bill Edward Morrison Kansas City, Missouri Edgar Reabuck

Philadelphia, Pennsylvania Iohn Lakeland Rewis

Nashville, Tennessee

Lawrence Richmond Westport, Connecticut Hans Rubarth

Ottawa, Ontario, Canada Levern Schaut

Buffalo, New York Richard Shorell

Chicago, Illinois

Leonard Sicurella Gonawanda, New York

Easton Smith Washington, D. C.

Margaret Stewart Pompano Beach, Florida

Livio Leandre Testoni Warwick, Rhode Island





I.P.P.B. with AIR or OXYGEN: your choice with M-S-A Pulmonary Ventilators

This is the compressor model used for air mixtures.

Other models are available for 100% oxygen or air-oxygen mixtures. Also, "total flow" Heated Mainstream Nebulizer available for all models.

Write for descriptive literature or ask for a demonstration.



Mine Safety Appliances Company

201 North Braddock Avenue Pittsburgh 8, Pennsylvania



Cylinder Model

EQUIPMENT NEWS

(Information and photographs are supplied by the manufacturers or distributors.)

New training manikin

Alderson Research Laboratories, Long Island City, N.Y., has introduced a life-size manikin for teaching and practicing mouth-to-mouth resuscitation techniques. Surfaced with a plastic "skin" feeling like human skin, the RESPERTRAIN



manikin employs a valve system in its airway that makes it function like humans. If the head is incorrectly positioned, the lungs do not inflate because of the blocked airway, and the air is diverted into a "stomach" bladder. Correct positioning permits the "lungs" to fill as they should.

No. 661

Portable aerosol generator

Eliminating the need for canopies, masks or tents, the Air-Shields (Hatboro, Penna.) Mist-I-Fier, a centrifuge type aerosol generator, produces droplets averaging 8 microns in diameter at 3 feet from its output port. About 2½ quarts of water are aerosolized in 10 hours. This compact portable unit (weighs only 6 lbs.) can be placed on a bedside or overbed table close to



the patient, whose face will be bathed in the fog stream, insuring good saturation of the inspired air with moisture.

No. 662

MORE DATA . . .

. . . can be obtained by mailing this coupon to "Inhalation Therapy," Room 904, 332 South Michigan Avenue, Chicago 4, Illinois.

661

662

Please send data on item checked to:

.....

Title.....

Address

City.....State.....

by reporting each incident so that it can be investigated and its re-occurrence prevented. The Safety Committee will in turn work with the safety committees of the other organizations that are striving to insure the security and welfare of our patients. Fourth: making existing information more readily available to all concerned. Which is most important? This cannot be answered, because they are all needed, perhaps with variations, but still needed.

The challenge is this: to make the medical profession, as well as the public, more aware of the dangers which lie in the misuse of oxygen. Can we meet this challenge? If not, then we are not living up to our obligations as therapists. However, I believe this challenge can be met; and we can do so because it has to be done.

REFERENCES

1. Ciliberti, B.J., and Wood, P.M. "Survey of Fires and Explosions in Hospitals in the United States." Jour. Of Surgery LXXXIII: 527-530, April, 1952. 2. Gilroy, J. GIVE FIRST CONSIDERATION TO SAFETY. Ohio Chemical & Surgical Equipment Co., Madison,

3. Miller, A.E. GASEOUS OXYGEN FIRES AND EXPLO-SIONS. Scott Aviation Corporation, Lancaster, New York.

4. Thomas, G.J. A MANUAL FOR PREVENTION OF FIRE & EXPLOSIONS IN HOSPITALS. A. S. Aloe Company, St. Louis, Missouri.

5. SAFETY RULES GOVERNING OXYGEN CYLINDERS IN HOSPITALS. National Cylinder Gas Company, Chicago, Illinois: Form NM-197, April, 1953.

6. CLOSING THE EYES OF PAIN. Ohio Chemical & Surgical Equipment Co., Madison, Wisconsin: Form No. 4662.

7. SAFETY IN HOSPITALS. Ohio Chemical & Surgical Equipment Co., Madison, Wisconsin: Form No. 2117. 8. CHARACTERISTICS AND SAFE HANDLING OF GASES. Compressed Gas Association, New York: Pamphlet P-2.

9. PIN-INDEX SAFETY SYSTEM FOR FLUSH-TYPE CYLIN-DER VALVES. Compressed Gas Association, New York: Pamphlet V-3.

10. Saklad, M. INHALATION THERAPY AND RESUSCI-TATION. Charles C. Thomas, publisher: 1953. 11. Andrews, A. H., Jr. MANUAL OF OXYGEN THER-APY TECHNIQUES. The Year Book Publishers, Inc.:



only \$249 COMPLETE Thompson PORTABLE MEDI-BREATHER

Dealer Inquiries Welcomed

NO OXYGEN REQUIRED*

1947.

Delivers Pure, Filtered Room Air



A patient cycled device that provides effective distribution of aerosols such as bronchalilators and detergents used for treatment offering, relief from distress of emphysema, asthma, bron-chitis, etc. Write for full information.

*Oxygen may be added if needed.

World's Largest Manufacturer of Portable Respirators RESPIRATION PRODUCTS, INC.

NOMPSON Industrial Park
BOULDER, COLORA

BOULDER, COLORADO

Officers and Board of Directors for Coming Year

President Mrs. Leah Tharaldson, CRNA Minnesota

1st Vice Pres. Bernard M. Kew Ohio

2nd Vice Pres. Sister M. Blanche, RN Ohio

Secretary-Treasurer Agnes M. Forrest Illinois

Chairman of the Board Joseph J. Klocek, RN New York

State Continuing Directors Term Expires Indiana Paul Noble Price 1962 Delaware James E. Peo, RN 1962 Mrs. Grace Farley, RN 1962 Texas 1962 Canada Jack Sangster Walter D. Palmer 1963 Pennsylvania Walter L. Jones 1963 California Jerome Heydenberk 1963 Michigan Colorado Mrs. Vivian Curtis, RN 1963

Newly Elected Directors Term Expires State Florida 1964 Melvin H. Hall Leonard L. Gurney 1964 Massachusetts Washington, D.C. Easton R. Smith 1964 Indiana 1964 Joanna Groenewold, RN Illinois Wilmetta Merchant, CRNA 1964

policy involves things of a medical nature, it is only fitting that we be guided by a group of doctors.

As a matter of fact, the writer can remember only two occasions when the Advisory Board used its influence to veto Board decisions. In both instances time has proven the wisdom of this action.

The commendable thing about the six doctors who comprise the Advisory Board is their complete and unselfish dedication to the A.A.I.T. and its affairs. Not only have these men given the A.A.I.T. a tremendous amount of time and energy and thought, they have each made quite substantial financial contributions, by paying their own travel and other expenses to meetings, and by taking large chunks of time out of their practice to help the association.

In addition to their duties as members of the Advisory Board, these same six men also serve as Board Members of the American Registry of Inhalation Therapists. The A.R.I.T. Board of Directors consists of the six doctors plus three members of the A.A.I.T., a total of nine.

They are as follows: Sister M. Yvonne, Registrar; Don E. Gilbert; James M. Whitacre, Secretary; Dr. Albert H. Andrews, Jr., President; Dr. M. Saklad, Treasurer; Dr. Edwin R. Levine; Dr. Vincent J. Collins; Dr. Duncan Holaday; and Dr. H. Bickerman.

The total amount of just man-hours that this group has put into the planning, formation, and operation of the Registry is simply staggering. Again, it should be emphasized, for all nine persons involved, the six physicians and the three inhalation therapists, this is entirely a labor of love. No one is paid; no one has ever received any recompense for time and work contributed. In fact, it would be impossible to measure in dollars and manhours the contribution made by this group of dedicated people to the growth in dignity and stature of both the American Association of Inhalation Therapists and inhalation therapy itself.

All of us should be deeply grateful to them. Now what about the future of the American Association of Inhalation Therapists?

How do our professional standards compare with those of other paramedical associations?

What does it appear that our growth will be during the next five years?

Since the writer is neither a medical doctor nor an inhalation therapist, it may seem presumptuous of him to express an opinion about these matters. Nevertheless, having nurtured the early life and carefully watched the growth of the A.A.I.T., and having carefully observed and worked with other comparable associations, perhaps a prognosis will not be out of order.

There is no doubt that over the next five years membership in the A.A.I.T. will increase substantially. Evidence of this lies in the increasing awareness of inhalation therapy, in the great number of inquiries about the Association, and the deluge of correspondence asking about eligibility.

From all indications, it seems likely that we shall increase the membership in the A.A.I.T. from its present 1200, approximately, to at least three thousand by 1964. This is a conservative estimate.

Hospitals throughout the United States and Canada are becoming more and more aware of the importance of inhalation therapy in better patient care. Increasingly, hospitals are establishing new departments of inhalation therapy.

In short, the American Association of Inhalation Therapists is likely to become a fairly large association chiefly because at long last inhalation therapy has come of age.

Well, there it is, the story about your association and how it operates.

Complex? Yes, indeed.

A thankless job? Well, sometimes.

Frustrating? Frequently.

But it is also endlessly interesting, and each new day presents problems which serve as a challenge to the Executive Director and his associates, and make the job not just hard work but a terrific amount of fun.

-Albert Carriere
Executive Director





This new YOKE-GAUGE-REGULATOR is used with type "D" and "E", post type valve cylinders. All assembly parts are accessible for ease of adjustment. It requires less than one full turn of the index knob to regulate flow from 0 to 15 liters. Gauge also registers contents in increments of $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and full.

this is a new and very useful yoke-gauge-regulator combination

This new Yoke-Gauge-Regulator combination functions automatically to maintain a desirable accurate liter flow regardless of cylinder pressure. In order to maintain the required flow this regulator employs an accurately machined piston provided with "O" rings. The up and down movement of this piston is mechanically restricted. This unit is made of dense brass die forgings and solid bar stock for durability and long service life. Heavily chrome plated. A self reseating pressure relief valve acts automatically in the event of a seat failure. The yoke is pin indexed for 0_2 ; also available for other cylinder gases upon request. A tapered tailpiece accommodates various sizes of administration tubings.

NATIONAL medical equipment division...

218 fremont street san francisco 5 california



ALEVAIRE

(NONTOXIC MUCOLYTIC DETERGENT AEROSOL)

... results are impressive. This dreaded condition usually improved in a few hours, and it was really striking to see a cyanotic baby with gasping respirations and suprasternal retraction become relaxed and pink in such a short period of time."

In the elderly patient with chronic bronchitis "...favorable therapeutic response is obtainable with the use of Alevaire."

ALEVAIRE is very helpful in:

- neonatal asphyxia (due to inhalation of amniotic fluid, mucous obstruction, atelectasis)
- · croup · laryngitis · tracheobronchitis
- pertussis pneumonia bronchial asthma
 emphysema bronchiectasis lung abscess
- pneumoconiosis
 smoke, kerosene poisoning
- poliomyelitis (respiratory complications)
- routine oxygen therapy tracheotomy
 prevention of postoperative pulmonary complications

Alevaire is supplied in bottles of 60 cc. for intermittent therapy and bottles of 500 cc. for continuous inhalation therapy. Alevaire should not be diluted. Alevaire solution is ready for use in a concentration optimal for fine droplet stability and therapeutic efficiency.

Write for illustrated brochure.

 Smessaert, Andre, Collins, V. J., and Kracum, V. D.: New York J. Med. 55.1587, June 1, 1955.

2. Banyai, A. L : Geriatrics 14 621, Oct., 1959

Before administering be sure to consult Winthrop's literature for information about dosage, possible side effects and contraindications.

Winthrop LABORATORIES
New York 18, N. Y.

Alexaire, trademark reg. U.S. Pet. Off

Continentalair ICELESS OXYGEN TENT

WITH AUTOMATIC TEMPERATURE CONTROL

CONTINENTAL'S DIALOMATIC CONTINENTALAIR

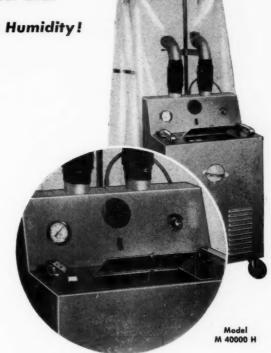
Simply Set Dial

For Desired Humidity!

OVER 20,000 NOW SERVE

MEDICAL CENTERS

THROUGHOUT THE WORLD!



Only with CONTINENTALAIR can you buy ORIGINAL RESEARCH and the PRACTICAL EXPERIENCE and PRIDE of WORKMANSHIP ensured by OVER 20 YEARS of CONTINUOUS MANUFACTURE

CONTINENTAL HOSPITAL INDUSTRIES, INC.

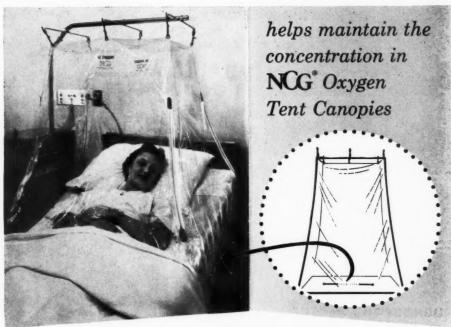
Box 2 • 18624 Detroit Ave. • Cleveland 7, Ohio

AMERICAN ASSOCIATION OF INHALATION THERAPISTS Room 904, 332 South Michigan Chicago 4, Ill.

BULK RATE
U. S. Postage
PAID
Chicago, Illinois
Permit No. 1156

Form 3547 Requested

TUCK-LINE



Clearly visible bold green tuck-line helps nurse or therapist see at a glance if canopy is tucked in right. Saves time, helps maintain concentration. NCG Tent Canopies give you many other advantages: full 60 inch vinyl plastic; four 20 inch vertical metal zippers open "up"—one in each corner; green bias tape binding; reinforced grommets; 150% stretch green elastic suspension tabs that absorb much twisting and pulling; easily readable NO SMOKING signs.

Permanent 3 mil canopies have metal grommet suspension; extra weight 5 mil canopies feature heavy fused plastic grommets. Canopies cover 34 of bed area, "tailor-made" for all standard models of oxygen tents. Full bed units are available on special order. Packed in individual envelopes, three to a carton. Package shows model number and specific tent identification.



NATIONAL CYLINDER GAS

Division of CHEMETRON CORPORATION 840 North Michigan Avenue Dept. M-8N Chicago 11, Illinois

CHEMETRON

© 1960, Chemetron Corporation

